

Question	Answer
11.	$TU > SV$
13.	$-3.5 < z < 32.5$
15.	The lengths of the arms are the same in both positions, but the included $\angle$ measure is greater in the second position. Therefore, by the Hinge Thm., the distance from the cab to the bucket is greater in the second position.
16.	<ol style="list-style-type: none"> <li>1. <math>\overline{JK} \cong \overline{NM}, \overline{KP} \cong \overline{MQ}, JQ &gt; NP</math> (Given)</li> <li>2. <math>\overline{QP} \cong \overline{QP}</math> (Reflex. Prop. of <math>\cong</math>)</li> <li>3. <math>QP = QP</math> (Def. of <math>\cong</math> segs.)</li> <li>4. <math>JQ + QP &gt; NP + QP</math> (Add. Prop. of Inequal.)</li> <li>5. <math>JQ + QP = JP, NP + QP = NQ</math> (Seg. Add. Post.)</li> <li>6. <math>JP &gt; NQ</math> (Subst.)</li> <li>7. <math>m\angle K &gt; m\angle M</math> (Conv. of Hinge Thm.)</li> </ol>
18.	$<$
24.	$AC > DF$